

REMARKS

Claims 1-26 are pending. Claim 1 has been amended and claim 10 has been cancelled, leaving claims 1-9 and 11-26 for consideration upon entry of this amendment. Reconsideration and allowance of the pending claims are respectfully requested in view of the following remarks.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1-26 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by JP Patent No. 09 059225. Applicants respectfully traverse this rejection.

Claim 1-11

'59225 discloses a method of producing diaryl carbonate, making use of 2 reactive distillation columns. From upper part of the first reactive distillation column unreacted dialkyl carbonate, aliphatic alcohol and alkyl aryl ether is sent to a distillation column (3). Distillation column 3 has an intermediate fraction to be recycled back to the first reactive distillation column 1. A heavy fraction is extracted from the distillation column 3, which contains 10-30% alkyl aryl ether (paragraph 29).

In contrast, the amended claim 1 describes a process of producing substantially pure alkyl aryl ether wherein the product stream from the process comprises at least 95% alkyl aryl ether by weight.

To anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1007 (1988). As discussed above, '59225 does not disclose the production of at least 95% pure alkyl aryl ether and hence cannot anticipate independent claim 1. Claims 2-9 and 11 depend directly or indirectly from claim 1 and are similarly allowable.

Claim 12-22

'59225 discloses a method of producing diaryl carbonate, making use of 2 reactive distillation columns. From upper part of the first reactive distillation column unreacted dialkyl carbonate, aliphatic alcohol and alkyl aryl ether is sent to a distillation column (3). Distillation column 3 has an intermediate fraction to be recycled back to the first reactive distillation column

1. A heavy fraction is extracted from the distillation column 3, which contains 10-30% alkyl aryl ether (paragraph 29).

In contrast, claim 12 discloses a method of producing a diaryl carbonate and alkyl aryl ether making use of 3 reactive distillation columns and 2 rectification columns wherein each bottom and top stream are closely integrated in the process to produce substantially pure alkyl aryl carbonate from the bottom of the second rectification column. All the elements of claim 12 are not anticipated nor suggested by '59225 and therefore claim 12 is allowable. Claims 13-22 depend directly or indirectly on claim 12 and therefore similarly allowable.

Claim 23

Claim 23 discloses a method wherein a side fraction is taken from the first reactive distillation column and the side stream is rectified in a rectification column to recover a substantially pure alkyl aryl ether stream. '59225 does not disclose or suggest use of a side stream from the first reactive distillation column to produce substantially pure alkyl aryl carbonate. Therefore claim 23 is not anticipated by '59225 and allowable.

Claim 24-25

Claim 24 discloses an apparatus comprising 2 reactive distillation columns and 2 rectifications columns integrated to produce a substantially pure alkyl aryl ether. '59225 does not disclose all the elements of claim 24 and therefore claim 24 is not anticipated by '59225.

Claim 25 similarly discloses an apparatus comprising 3 reactive distillation columns and 2 rectification columns integrated to produce diaryl carbonate and alkyl aryl ether. Furthermore the top stream from the first reactive distillation column goes to a splitter to produce a first split stream and a second split stream. This apparatus is neither disclosed nor suggested by '59225. Therefore claim 25 is not anticipated by '59225 and therefore allowable.

Claim 26

Claim 26 discloses a method for making a polycarbonate and substantially pure alkyl aryl ether. '59225 does not disclose a method of making polycarbonate and substantially pure alkyl aryl ether. Therefore claim 26 is not anticipated by '59225 and therefore allowable.

It is believed that the foregoing remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

Respectfully submitted,

CANTOR COLBURN LLP

By Patricia S. DeSimone
Patricia S. DeSimone
Registration No. 48,137

Date: August 18, 2005
CANTOR COLBURN, LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone (860) 286-2929
Facsimile (860) 286-0115
Customer No.: 43248

26. (original) A method of making polycarbonate and substantially pure alkyl aryl ether, said method comprises reacting a bisphenol with a diaryl carbonate wherein said diaryl carbonate and said alkyl aryl ether is prepared by:

reacting a dialkyl carbonate and an aromatic alcohol in the presence of a transesterification catalyst in a first reactive distillation column;

recovering from said first reactive distillation column a stream comprising said dialkyl carbonate, said alkyl alcohol and said alkyl aryl ether;

separating said alkyl aryl ether in said stream from said dialkyl carbonate and alkyl alcohol in a rectification column; and

recovering from said rectification column a product stream comprising substantially pure said alkyl aryl ether.